OVERRIDING GOVERNMENTAL AND ACADEMIC DOCUMENTS DIRECTING CONCEPT OF FORCE HEALTH PROTECTION AND ENVIRONMENTAL HAZARDS ASSESSMENT

Presidential Review Directive 5, A National Obligation, Planning for Health Preparedness for and Readjustment of the Military, Veterans, and Their Families after Future Deployments, August 1998

This document is a guide for Force Health Protection planning. Requirements include DoD and VA programs for comprehensive electronic health and health risk factor information on all recruits and officer accessions at the time of initial military training; programs for collection and maintenance of military personnel data, including demographic and occupational data, and longitudinal records of service members' military experiences, including pertinent data on occupational and environmental exposures and events. In addition, VA, DoD, and DHHS should develop and implement a coordinated interagency program to communicate health risk information, related to current and future deployments, to military members, veterans, family members, and the public.

#### Government Accounting Office (GAO) Reports

### Government Accounting Office (GAO), T-NSIAD-96-154, Chemical and Biological Defense: Emphasis Remains Insufficient to Resolve Problems, 1 May 1996

This report describes how U.S. troops remain highly vulnerable to attack from biological and chemical agents because the Defense Department (DOD) has yet to address many shortcomings identified during the Persian Gulf War, including inadequate training, a lack of decontamination kits and other equipment, and a shortage of vaccine stocks. It states problems in chemical and biological defense are likely to continue unless DOD designates this area a higher priority and increases funding.

## Government Accounting Office (GAO), NSIAD-98-228, Chemical Weapons: DoD Does Not Have a Strategy to Protect the Health of Deployed US Forces, 23 September 1998

This report states that despite research indicating that even low-level exposure to chemical weapons can impair short-term performance and cause long-term health problems, the Defense Department (DOD) has yet to develop an integrated strategy to defend U.S. troops against this battlefield threat. Specifically, DOD has neither stated a policy nor developed a doctrine on protecting service members from low-level chemical exposure. It states that DOD's current strategy is to maximize the effectiveness of troops in a lethal environment involving nuclear, biological, and chemical agents. However, research by DOD and others

indicates that a single exposure to some chemical warfare agents can have adverse psychological, behavioral, and performance consequences.

#### National Academy of Science (NAS) Reports

#### Institute of Medicine, Protecting Those Who Serve: Strategies to Protect the Health of Deployed US Forces, 2000

This report describes the challenges and recommends a strategy to better protect the health of deployed forces in the future. It was based on a series of earlier *Strategies to Protect the Health of Deployed US Forces* reports. Many of the recommendations are restatements of recommendations that have been made before or recommendations that have not been implemented. The report states that further delay could result in unnecessary risks to service members and could jeopardize the accomplishment of future missions. The authors recognize the critical importance of integrated health risk assessment, improved medical surveillance, accurate troop location information, and exposure monitoring to force health protection. They feel that failure to expedite these areas will further erode the traditional trust between the service member and the leadership.

#### Institute of Medicine, Potential Radiation Exposure in Military Operations, 1999

The report addresses recommendations for dosimetry, radiation physics, and the medical follow-up of potential, subsequent tumor development. The ethical framework presented in this report applies to potential harms beyond those posed by radiation alone. Soldiers face bullets, explosive devices, climatic and weather extremes, and endemic infections, as well as nuclear, chemical, and biological agents. On a daily basis, commanders in the Pentagon and in the field face decisions that affect the safety of the troops in their charge. This committee lays out a framework for those decisions, be they at a mission's planning stage, during its operation, or in its immediate or long-term aftermath. In weighing the risks of a mission that may involve radiation doses to its participants, a commander must somehow quantify not only the immediate and long-term effects of radiation, but also the risks of alternative, radiation-free, approaches to the same mission. To do this, a commander must have information that is understandable and useful. The components of the committee's framework should apply, therefore, in all instances of exposure of military personnel to hazards, during times of war and during times of peace.

### OVERRIDING DEPARTMENT OF DEFENSE DOCUMENTS DIRECTING CONCEPTS OF FORCE HEALTH PROTECTION AND ENVIRONMENTAL HAZARDS ASSESSMENT

#### DoDI 6055.1, DoD Safety and Occupational Health (SOH) Program, 19 August 1998

This document requires that the risk management process shall be institutionalized and be an inherent part of all military operations to address safety and occupational and environment health risks.

#### DoD Directive 6490.2, Joint Medical Surveillance, 30 August 1997

This Directive establishes policy and assigns responsibility for routine joint medical surveillance of all Military Service members during active Federal service before, during, and after deployment. It mandates risk communication regarding health threats and countermeasures. It requires continuous medical surveillance before, during, and after deployment and monitoring for environmental, occupational and epidemiological threats and stressors. Medical surveillance activities will include essential DoD civilian and contractor personnel directly supporting deployed forces as appropriate.

#### DoD Instruction 6490.3, Implementation and Application of Joint Medical Surveillance for Deployments, 7 August 1997

This Instruction expands the concept of joint deployment medical surveillance to a more comprehensive approach to monitoring and assessing health consequences related to service member participation in deployments. The Instruction mandates medical surveillance of all military service members during active Federal service, including Reserve components, especially before, during and after military deployments. It mandates USACHPPM maintain a medical surveillance system to integrate, analyze, and report data from multiple sources relevant to the health and readiness of military personnel.

### Memorandum, MCM-0006-02, *Updated Procedures for Deployment Health Surveillance and Readiness*, 1 February 2002

This memorandum provides standardized procedures for assessing health readiness and conducting health surveillance in support of all military deployments. It provides guidance for disease prevention, and occupational and environmental actions required pre-, during, and post-deployment. OEH risk assessment components that require initial and continued surveillance include: ambient air, soil, water, radiation, noise, and other occupational hazards. Preventive medicine personnel will document and report performance and results of the surveillance in accordance with DoD/Joint and Service policies. This memorandum addresses general and specific occupational and environmental health surveillance requirements which include the conduct of comprehensive

surveillance, risk assessments, risk communication, control of health hazards, reporting and archiving health surveillance data and reports, and documentation in medical records. Services will also continuously review and update environmental health risk assessments throughout the deployment using data collected in theater.

### Memorandum, MCM-0026-02, Chemical Warfare (CW) Agent Exposure Planning Guidance, 29 April 2002

This document provides interim guidance for protection of forces against CW agent exposure. It addresses the use of appropriate protective equipment when operating near any detectable CW agent, where agents are suspected, or when participating in decontamination operations. It requires health surveillance and readiness documentation actions to be performed in accordance with MCM 0006-02, *Updated Procedures for Deployment Health Surveillance and Readiness*, 1 February 2002. Documentation must include identifying Service members that are exposed or possibly exposed to CW agents (protected or unprotected), their location and time in hazard area, and all monitoring results (to include those within standards).

#### Joint Publication 4-02, *Doctrine for Health Service Support in Joint Operations*, 30 July 2001

This document states the combatant commander is responsible for the execution of the FHP mission within his or her area of responsibility. The primary objectives of force health protection are to protect the health of and provide health service support to US forces. The Joint Force Surgeon section of the Combatant Command is responsible for performance of health threat assessments and theater health surveillance. Risk assessments, preventive medicine measures, and medical surveillance are to be included early in health service support planning and included in the Health Service Support Annex to the supporting operation plan or operation order.

### Joint Publication 4-04, *Joint Doctrine for Civil Engineering Support*, 27 September 2001

This publication provides the guidance and procedures necessary to plan, coordinate, and conduct timely and tailored joint civil engineering support across the range of military operations. It describes health service support requirements for water and wastewater, including water vulnerability assessment support, sanitation, waste disposal (e.g., hazardous and infectious waste), health risk assessment (e.g., base camp site selection), environmental health sampling and surveillance, and vector control to protect human health and welfare.

Field Manual 3-100.4, *Environmental Considerations in Military Operations*, 1 June 2000

This field manual (FM) provides guidance in applying appropriate environmental protection procedures during all types of operations performed by the US Army and US Marine Corps. It also provides basic techniques and procedures for units at the company, battalion, and brigade/regiment levels. It describes how to apply risk management methods to identify actions that may harm the environment and appropriate steps to prevent or mitigate damage.

Field Manual 3-100.12/Marine Corps Reference Publication 5-12.1C/Navy Tactics, Techniques, and Procedures 5-03.5/Air Force Tactics, Techniques, and Procedures (I) 3-2.34, Risk Management: Multi-Service Tactics, Techniques, and Procedures for Risk Management, 15 February 2001

This publication provides multi-service tactics, techniques, and procedures for tactical level risk management in the planning and execution of operations in a joint environment. It provides a basic risk management process that may be used by all services. It applies to all elements of a force that assists in planning and conducting force protection. It provides risk management tools for commanders and staffs to use to manage risk during planning, preparation, and execution of joint operations.

#### ARMY SPECIFIC FORCE HEALTH PROTECTION POLICY AND DOCTRINE

HQDA Letter 1-01-1, Force Health protection (FHP): Occupational and Environmental Health (OEH) Threats, 27 June 2001

This document establishes responsibilities that direct commanders to use the operational risk management process to manage occupational and environmental hazards (OEH) and to minimize the total health and safety risk to personnel across the broad spectrum of military operations. This includes identifying, documenting, and reporting exposures to OEH hazards (e.g., chemical, biological, radiological) that may result in short- or long-term health effects to deployed military personnel.

#### FM 100-14, Risk Management, 23 April 1998

This document explains the principles, procedures, and responsibilities to successfully apply the risk management process to conserve combat power and resources. The manual applies to both Army and civilian personnel during all Army Activities, including joint, multinational, and interagency environments. The manual provides commanders, their staffs, leaders, and managers a risk management process framework. Additionally, it helps to make risk management a routine part of planning, preparing, and executing operational missions and everyday tasks.

#### AR 40-5 Preventive Medicine, 15 October 1990, (currently being updated)

This regulation is a substantive revision of the 1990 policy and responsibilities relating to preventive medicine. It redefines preventive medicine and preventive medicine services; requires the incorporation of occupational and environmental health threats into the Army's operational risk management; incorporates the concepts of the Joint Staff's Force Health Protection; adds medical surveillance and occupational and environmental health and exposure surveillance policy and responsibilities; implements Department of Defense Directive 6490.2 and Department of Defense Instruction 6490.3 policy and procedures for medical surveillance; requires the addition of programs and services for deployment occupational and environmental health threat management, health risk assessment, medical and occupational and environmental health surveillance, and health risk communication;

#### DA Pamphlet 40-5, Preventive Medicine, Draft

This new pamphlet defines and establishes programs, services, functions, and procedures for implementing the essential elements of Army preventive medicine. It provides instructions, guidance, and procedures and delineates the functions necessary for implementing the policies and responsibilities outlined in AR 40-5. Requirements include deployment occupational and environmental health surveillance; health risk assessment; health risk communication; disease prevention and control; field preventive medicine; environmental health; occupational health; health surveillance and epidemiology; soldier, family, community health, and health promotion; preventive medicine toxicology; and preventive medicine laboratory services.

#### Field Manual 8-55, Planning for Health Service Support, 9 September 1994

This manual provides guidance to health service support (HSS) planners at all echelons of care within a theater of operations (TO). It contains a digest of the accepted principles and procedures pertaining to HSS planning. Information in this publication is applicable across the spectrum of military operations. It is compatible with the Army's combat service support (CSS) doctrine. The planner must supplement or replace the data in this manual with any known factors to meet the needs of his particular situation.

### Field Manual 4-02, Force Health Protection in a Global Environment, 13 February 2003

This document provides the keystone doctrine for force health protection in a global environment in support of deployed forces. Force health protection in a global environment is the overarching concept of support for providing timely medical support to the tactical commander. This publication identifies functions and procedures essential for operations. It addresses the performance of

preventive medicine services. It includes operational risk management, medical intelligence of the battlefield, risk assessment, occupational and environmental health surveillance, and risk communication performance.

#### Field Manual 4-02.17, Preventive Medicine Services, 28 August 2000

This manual provides the mission, organization, and responsibilities for preventive medicine (PVNTMED) support operations throughout the operational continuum. It is directed toward the commanders at all levels of deployment, their staffs, the command surgeons, the PVNTMED planning staffs at the Army, joint, combined, allied, and coalition staff levels, and to the individual soldier and unit leaders on their role in the application of preventive medicine measures. It provides procedures for directing, controlling, and managing PVNTMED assets within the area of operations (AO). This publication outlines the functions and operations of each PVNTMED section and how it integrates its activities in support of military operations. It contains tactics, techniques, and procedures relative to PVNTMED support in specific areas.

# IMPLEMENTING GUIDANCE DOCUMENTS (RELATIVE TO ASSESSMENT AND MANAGEMENT OF CHEMICAL HAZARDS DURING DEPLOYMENT, AS DIRECTED BY AFOREMENTIONED DOD AND ARMY REQUIREMENTS)

#### Technical Bulletin-Medical (TB MED) 577, Sanitary Control and Surveillance of Field Water Supplies, 7 March 1986 (currently being updated)

This publication defines potable water and describes the specific criteria for field drinking water supplies. It provides information and guidance related to the location, production, sanitary control, and surveillance of potable field water supplies. It describes responsibilities and procedures for using operational risk management methods, risk communication techniques, water quality surveillance, sampling, analysis, and conducting field water vulnerability assessments.

# US Army Center for Health Promotion and Preventive Medicine Technical Guide 248, *Guide for Deployed Preventive Medicine Personnel on Health Risk Management*, August 2001

This technical guide introduces the processes and tools that can be used to make appropriate decisions based on the medical threat. It is written for preventive medicine personnel who are assigned the task of providing health risk assessments to the commander based on occupational and environmental health and endemic disease surveillance for deployments. It is directed at medical staff-level personnel who will be identifying, assessing, and communicating these hazards in the operational risk management process. It provides a general overview of how these hazards can be evaluated within the context of Field Manual (FM) 100-14, *Risk Management*, and how to communicate these risks to the commander.

US Army Center for Health Promotion and Preventive Medicine Technical Guide 230, *Chemical Exposure Guidelines for Deployed Military Personnel*, January 2002, Version 1.2 updated 26 April 2002

This Technical Guide provides application guidance describing how the Military Exposure Guidelines can be used to characterize the level of health and mission risks associated with identified or anticipated exposures to chemicals in the deployment environment in a manner consistent with the existing military Operational Risk Management (ORM) doctrine. It provides military exposure guidelines for chemicals in air, water, and soil for use during deployments. The intent is that trained personnel such as preventive medicine officers, environmental staff officers, industrial hygienists, health risk assessors, or other medically trained personnel, can use this guide to consistently characterize risks from chemical exposures by use of a standardized process that is both scientifically supportable and militarily feasible.